

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of)	
)	
Closed Captioning of Video Programming)	CG Docket No. 05-231
)	
Notice of Proposed Rulemaking)	
Released July 21, 2005)	
)	

COMMENTS OF CAPTION COLORADO, L.L.C.

NOVEMBER 8, 2005

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CAPTION COLORADO, L.L.C.
5690 DTC Blvd., Suite 500
Greenwood Village, CO 80111
720.489.5662

Tad Polumbus
President, CEO

1. INTRODUCTION

Caption Colorado, L.L.C. is pleased to respond to the FCC's Notice of Proposed Rulemaking (the "NPRM") adopted on July 14, 2005 to examine the Commission's closed-captioning rules and appreciates the opportunity to do so.

2. Caption Colorado, L.L.C.

Caption Colorado, L.L.C. is a full service television closed captioning company offering both offline and realtime services for all types of television programming, including realtime services for breaking news and emergency news captioning. Our primary market niche is realtime captioning for local television stations but we provide an extensive amount of both realtime and offline captioning for a significant number of cable networks and production companies as well.

Our remarks have been prepared primarily by R.T. Polumbus, President and Chief Executive Officer of Caption Colorado, L.L.C., with significant input from Patty Geissler, VP Realtime Captioner Development and Training and Mike Lyons, Vice President of Offline Operations. Mr. Polumbus has been the primary owner of Caption Colorado, and held his current positions with the company, for approximately 7 years. Mrs. Geissler has over 15 years of experience as a realtime television captioner and in the management of realtime captioning business and is well known throughout the captioning industry. Mr. Lyons has also been involved in the offline captioning business as both a captioner and in key management positions for over 15 years, and is well known throughout the captioning industry.

3. General Introductory Comment

Caption Colorado's comments in this document will refer primarily to the non-technical quality standards being considered by the Commission in its Rule Making endeavor and to both the positive and negative impact that non-technical

quality standards and/or associated reporting, complaint procedures and enforcement rules could have on the industry. Caption Colorado generally believes that non-technical quality standards should be adopted by the Commission for both offline and realtime captioning but is concerned that the adoption of standards for realtime captioning could result in one of several serious potential adverse consequences to the television industry, the closed captioning industry and/or to deaf and hard of hearing and other users of closed captioning.

Our concerns will be delineated more precisely in the following comments but, for the most part, they fall into one of several of the following broad categories;

- i. The possibility of standards for realtime captioning being too difficult to define, apply and enforce due to the very nature of realtime captioning which requires captioners to make many subjective judgments and to use many industry accepted skills which are often difficult to track and that often result in what might be considered an error in offline captioning and other environments but should not be in realtime captioning.
- ii. The possibility of such imprecise and subjective non-technical quality standards being unfairly used as a basis for justifying viewer complaints, reporting or complaint response requirements for the television and/or captioning industries and/or as a basis for fines or other penalties for non-compliance with the standards.
- iii. The possibility of complaint procedures and/or response requirements, reporting requirements and/or fines for non-compliance being excessively expensive and/or time consuming, and creating unacceptable exposure to liability, for both the television and captioning industries; Also possibly resulting in caption companies exiting the business and reducing the

amount of realtime captioning available to the deaf and hard of hearing viewers.

- iv. The possibility of reporting and response requirements and/or fines having the affect of pitting the television industry against the captioning industry in an adversarial relationship over responsibility for costs and liability, when exactly the opposite type of relationship is essential for teaming up on the challenging task of creating and delivering realtime captioning within the high quality technical and non-technical quality standards that the Commission is seeking.

As a consequence of these concerns and others, we are generally of the opinion that non-technical quality standards should be adopted for both offline and realtime captioning but that such standards should not be used as a basis for fines or other time consuming or expensive response or reporting requirements with respect to realtime captioning.

4. Comments Specifically Requested By Commission

References are to the Paragraph Numbers in the FCC Notice

Paragraph No. 9 Effectiveness of Commission's Current Captioning Rules

Caption Colorado believes the current FCC closed captioning rules have already demonstrated themselves to be effective and efficient in making television viewing available to deaf and hard of hearing Americans. We believe they will become even more effective after the January 1, 2006 phase-in to 100% coverage during the regulated hours because all television stations and networks will then be captioning realtime and they will have settled in for the long haul at maximum captioning coverage, looking for efficiencies.

Paragraph No. 10 Objective of Non-technical Quality Standards for Closed Captioning

The Commission's stated objective for Non-technical Quality Standards for closed captioning is relevant and important to many of the issues on which Comments are offered herein;

"... captions must provide information *substantially equivalent to that of the audio portion* of a video program in order to be useful and ensure accessibility to individuals with hearing disabilities."

Paragraphs Nos. 10 and 11

10.1 Quality Standards in Contracts.

Regarding the commission's concern that providers pursue quality standards in their relationships with captioning companies, we would offer for the general information of the Commission that all of our contracts with television stations and networks for realtime closed captioning services offer a guarantee to our customers that our services will be performed;

"in a good and workmanlike fashion in accordance with generally accepted industry standards for accuracy and timeliness."

We also provide our customers with a copy of the specific formula we use for evaluating the accuracy and quality of our captioning within industry standards. If we fail to meet those standards our agreement allows our customers to terminate our contract.

11.1 Assertion by TDI of "widespread problems" with non-technical captioning quality.

We can only comment on this assertion, of course, based on our own experiences. But we think it is *extremely important for the Commission* to investigate the accuracy of this assertion because our experience does not support the claim.

Caption Colorado captions many hundreds of events and many hundreds of hours every day. Over the course of the last 7 years since enactment of the Commission's mandatory captioning rules, we have responded to a significant number of complaints from deaf viewers, (although that number of events represents an incredibly small percentage of all the events we have captioned).

With respect to those events on which we did receive complaints, we *conducted a thorough evaluation of the captioning text and reported back to the viewers the results of our examination.* In every instance, the captioning was well within industry quality standards and, in fact, in many cases the quality of the captioning was actually outstanding.

This not an uncommon experience in our industry. It is due to the fact that realtime captioning always contains some errors and inexperienced users of captioning often do not fully appreciate that high quality captioning will not be error free. Inexperienced users also are often not capable of truly recognizing what high quality captioning looks like on the screen. Most inexperienced users of realtime captioning naturally observe the mistakes and note that there are a lot of them. They seldom stop to observe or think that the captioner is getting 98 or 99 out of every one hundred words correct as they continue observing the mistakes.

Paragraph No. 13 Non-technical Quality Issues

13.1 FCC: Should the Commission establish standards for the non-technical quality of closed captioning?

13.1.1 Yes, for Offline Captioning of Pre-recorded Programming!

The Commission should establish minimum non-technical quality standards for offline closed captioning of pre-recorded materials. It is feasible for the Commission to develop a set of specific, clear

and objective criteria for measuring the quality of Offline Captioning that could be consistently and fairly applied to all programs and/or within a few simple classifications or types of programming if need be.

13.1.1.1 Errors in offline captioning are much more quantifiable by the very nature of the work performed. It can be assumed that the caption service provider has a reasonable amount of time in the process and can provide nearly flawless caption presentations.

13.1.2 Yes, for Realtime Captioning of Live Television Programming

The Commission should consider establishing standards for non-technical quality of realtime closed captioning for the purposes of clarifying quality objectives and standards for the television and captioning industries; also for the purpose of providing deaf and hard of hearing viewers with clear and realistic expectations about the quality of realtime closed captioning. See discussion below, however, about the potential use of realtime quality standards as a basis for fines or other penalties for enforcement purposes.

13.2 FCC: Are there non-technical quality issues other than those generally considered (accuracy of transcription, spelling, grammar, punctuation, placement, identification of nonverbal sounds, pop-on or roll-up style, verbatim or edited for reading speed, and type font) that the Commission should consider?

13.2.1 Offline Captioning

Quality standards for offline captioning should be limited to true "quality" issues such as "accuracy of transcription, spelling, grammar, punctuation, placement, identification of nonverbal sounds, verbatim and edited for reading speed."

There are situations where slight editing from a verbatim transcript is useful and necessary. For example, verbatim speech is not always easy to read -- often due to false starts as the speaker clarifies what he or she wants to say or midway through a sentence uses fillers such as "um, ah, you know." Sentences may be slightly edited to omit such fillers that do not materially change the meaning of the audio and distract the viewer.

"Placement", "pop-on verses roll-up" and "type font" are all "style" issues that should not be considered in evaluating the "quality" of captioning. "Placement" in the context of the captioning window conflicting or covering up banners or other important information on the screen would be a "quality" issue.

The cost difference associated with some "style" preferences can be substantial and not all types of productions require or warrant the highest cost style presentations.

13.2.2 Realtime Captioning

We are not sure if the reference in your question above to "accuracy of transcription" (and/or to "verbatim") refers to the level of "accuracy" measured by a "verbatim transcription" of the words that were spoken, or to the level of "accuracy" in communicating the "meaning" of the words that were spoken. The latter is an appropriate standard when a captioner paraphrases a clause or sentence with her or his own words, or drops non-essential words or names under certain circumstances, so long as the captioner correctly communicates the "meaning" of the spoken words. Both "verbatim" transcription and non-verbatim transcription are proper

non-technical quality criteria or considerations in evaluating the quality of realtime captioning.

13.3 FCC: What would constitute an “error”?

13.3.1 Offline Captioning

In general, the captions presented should be a verbatim transcription of the audio track, with the exception of aforementioned situations in 13.2.1, where slight editing from a verbatim transcript is useful and necessary.

For convenience in measuring the quality of offline captioning, we recommend calculating errors as one each per occurrence and dividing errors into 3 major classifications;

13.3.1.1 Readability Errors

- a. Misspellings and wrong words (see Note 1 below)
- b. When a viewer cannot tell who spoke the captioned words and when the speaker has changed. (see Note 2 below)
- c. Missing or incorrect use of a “period” or “question mark.” (see Note 3 below)

Notes:

1. Even though offline captioners have the “luxury of time” not afforded a realtime captioner, deadlines, airdates and financial considerations do not allow for open-ended research time. Therefore proper nouns, foreign phrases, and other information not easily attained through normal research techniques should not be counted as errors.

2. Change of speakers are properly denoted by change of caption placement, specific caption ID (Mr. President:), italics, or the use of double or triple chevrons.
3. It could be argued that offline punctuation should be held to a higher standard than realtime caption's standards. Offline captions should have the appropriate punctuation to produce a highly legible reading experience while maintaining the meaning of what is said. End of sentence punctuation, commas and apostrophes are especially crucial. Dashes, em dashes, quotation marks and ellipses should be dealt with as style issues, not punctuation.

It is important to note that one can be "economical" with punctuation, especially considering our 32 character space limitations. For example -- you may not need a comma for readability in a case where the "journalistically correct" way of writing would be to include a comma.

Punctuation, particularly end of sentence and apostrophes should be used following generally accepted written English style guidelines such as "Chicago Manual of Style", etc.

Misused end of sentence punctuation or apostrophes (as these can change the meaning of the text) would be calculated as one error per occurrence. Commas and semicolons can be somewhat judgmental and will differ from what may be "correct" in writing and what may be necessary because of the space limitations

specific to captioning, and would not be counted as an error.

13.3.1.2 Completeness Errors

- a. A program is not captioned from start to finish.
- b. Not every relevant sentence is conveyed. (see Note 1 below)

Notes:

- 1. Non-relevant words or sentences may need to be omitted, for example, when there are multiple speakers. Due to space and timing limitations judgment calls by the captioner are normal occurrences and would not be counted as an error.

13.3.1.3 Style Errors

While caption providers adhere to a generally recognized list of styles and conventions that have evolved over the years within the industry, there is no comparable “Chicago Manual of Style” a captioner can refer to for style issues. Within that loosely defined criteria, it rightly allows the captioner to make the artistic decisions that are most appropriate for that particular program and enhance the viewer’s understanding and enjoyment of the program.

Examples of stylistic decisions typically performed by a captioner that would not be counted as errors (except for misspellings and punctuation as noted above; or lack of inclusion where appropriate) are:

- a. Relevant sound effects, including music, should be displayed to enable a viewer to fully comprehend actions and *ambiance of a program*.
- b. Relevant auditory effects are properly described.
- c. Dashes, em dashes, quotation marks and ellipses should be used to enhance the reader's understanding and enjoyment of the program and, if used, their meaning or use should be consistent within the program.
- d. Effort should be made to avoid obscuring important textual and visual information.
- e. Captions should not compete with other displayed text.
- f. Viewers can tell intonation, i.e. shouted, whispered, sung.
- g. Descriptions or other non-speech information should be clear and simple.

13.3.1.4 Timeliness Errors

Captions need to display with adequate time to be read completely. Captions may have to be purposely delayed or sent earlier to accommodate segments of very fast speaking or multiple speakers, or to allow sufficient time for a caption to load or clear. If this is not a consideration then captions should be in sync with the audio. In general situations the tolerance for latency of a caption to its corresponding audio should not exceed one second.

13.3.2 Realtime Captioning

For convenience in measuring the quality of realtime captioning, we recommend dividing errors into 3 major classifications;

13.3.2.1 Readability Errors

- a. Misspellings and wrong words
- b. Transposed words (see Note 1 below)
- c. Missing or Incorrect use of a “period” or “question mark” (see Note 2 below)
- d. Missing or Incorrect speaker or story ID; i.e. >>, >>> Reporter, >>> (see Note 2 below)
- e. Above errors properly corrected by Captioner = No error (see Note (3) below)

Notes:

1. *Transposed Words*. Each occurrence of 2 or more transposed words counts as 1 error. Words or clauses within a sentence that are out of order as a result of the captioner intentionally moving them, without affecting the meaning of the sentence, are not considered transposed words or errors.
2. *Adjustments to Word Count for Punctuation and Speaker/Story ID Errors*. In determining the number of words in a transcript from which accuracy and error rates will be calculated, periods and question marks and speaker and story ID's appearing in the transcript should not be counted initially. However, one word should be added to the total word count for each error counted for these types of errors.
3. *Adjustments to Word Count for Captioner Correction of Mistakes*. Errors properly corrected by the captioner during the realtime transcription shall not count as errors and the words or errors that were corrected shall not be counted in the number of words in the transcript.

13.32.2 Completeness Errors

- a. Missing words
- b. Added words
- c. Above errors properly corrected by Captioner – No error (see Note (3) above)

Notes:

Missing or added words are to be found by comparing the captioning transcript to the actual words spoken.

Missing or added words are not counted as errors if;

- 1. in the case of missing words, they were dropped because they were non-essential words and the meaning is accurately conveyed,
- 2. in the case of missing words, they were the name of a person not well known and or a foreign name and the person was adequately identified by title, position or other appropriate characterization,
- 3. they were missing or added in connection with paraphrasing by the captioner and the meaning is accurately conveyed,
- 4. they appear during segments of the broadcast when the pace of speech was in excess of 180 words per minute.
- 5. they were missing or added immediately before a commercial in order to clear the encoder in time for the commercial
- 6. they were missing or added as a direct result of the following or other Mitigating Circumstances beyond the control of the captioner or customer;
 - a) poor audio quality

- b) inaudible speech
- c) scripts or other materials not provided to captioner in advance of program
- d) continuous programming for longer than 20 minutes without a commercial break
- e) power failures, failure of equipment, software or telephone or Internet services at the captioner location, the customer location or elsewhere that is used for listening to the audio, delivery of the captioning text for encoding onto the broadcast signal or for any other purpose in connection with the captioning process.

13.32.3. Timeliness Errors

a. Offline captioning

See comments in paragraph

b. Realtime Captioning

Suggest average 5 seconds or less latency for an entire program, with maximum latency of 7 seconds for any word.

13.4 FCC: Are there reasons not to set standards for non-technical quality aspects of closed captioning?

There are several important reasons why quality standards for realtime television captioning should not be established at all or, at a minimum, should not be accompanied by enforcement measures that include reporting or proof of performance for viewer or FCC complaints or the use of fines or other significant penalties.

13.41 Quality Standards could cause loss of captioners; reduced captioning capacity.

See discussion in paragraph 14.2 below regarding the number of new captioners in the market place. If non-technical quality standards were set, as an example, at the "average" or "mean" quality levels existing in the marketplace today, approximately half of the current captioners in the United States would be eliminated from captioning and overall capacity for television captioning would be cut in half. Obviously, a drastic consequence to the deaf community.

Recommend market study to determine current quality level in market.
Before it considers adopting quality standards for any purpose, the Commission should know much more about the actual conditions in which realtime captioners are required to perform and the average number of unexcused errors and also the range of unexcused errors that actually exists in the market place today. That is especially true if the Commission intends to enforce quality standards through the use of fines or other penalties. We recommend that the commission cause an independent and completely anonymous market study to be conducted for this purpose before it acts to adopt any quality standards for realtime television captioning.

13.42 Increased Costs to Television Industry; Loss of Captioning Services.

If the Commission were to adopt quality standards and significant reporting requirements and/or proof of performance requirements for responding to viewer complaints, the time and expense

associated with such reporting and proof of performance measures would be significant. Costs associated with these functions will all be incremental to historical operating costs and could result in doubling of the current cost of realtime captioning depending upon the specific requirements adopted by the commission.

Caption companies are also currently providing realtime captioning services to the television industry under near break even financial conditions. Therefore, the total liability and incremental costs associated with new quality control and reporting and proof of performance requirements will ultimately have to be borne by the television industry. Otherwise current caption service companies will likely exit the captioning industry and derail the primary objectives of the FCC's program.

13.43 Conflicts/Litigation Between Caption Companies & Television Stations; Loss of Captioning Services; Poorer Quality Captioning.

The establishment of quality standards along with fines or other penalties to enforce the standards will pit television stations and networks against their captioning service providers to determine who should be responsible for fines or penalties when violations of the quality standards do occur. Establishing responsibility for poor quality captioning is not always easy and conflicts will be common and litigation likely between caption companies and their customers to resolve these issues. Due to the low profit margins already existing in the captioning industry, if caption companies are exposed to ongoing conflicts with their customers, expensive reporting and proof of performance documentation to either service the television industry or protect themselves, or to payment of significant fines or penalties and/or potential litigation expenses,

they will be forced to exit the business reducing available capacity for television closed captioning. It will also be necessary for the television industry and the captioning industry to work closely together to integrate their staff and policies and procedures to assure high quality captioning and service. Adversarial relationships will be a discouragement to this important process.

Paragraph No. 14 Costs

14.1 FCC: What would the costs be to programmers and distributors of mandating non-technical quality standards?

14.11 Offline Captioning

The passage of non-technical quality standards applicable to Offline captioning should not significantly impact the actual cost of production. Reputable offline caption companies already utilize multiple levels of quality control in their offline captioning processes to assure extremely high quality standards. However, there could be significant incremental costs associated with reporting and documenting proof of performance and responding to viewer and FCC quality complaints. The amount will depend on what the Commission requires with respect to these activities and the viewer complaint procedures it adopts.

14.12 Realtime Captioning

With respect to realtime captioning, see comments in paragraph 13.43 above with respect to reporting and proof of performance issues, financial condition of the captioning industry and potential conflicts between television stations or networks and their closed captioning service providers.

Costs of realtime captioning service will almost certainly increase significantly if the Commission forces the television or caption industries to incur the costs and risks associated with reporting, proof of performance and/or fines and pits the television industry against the captioning industry in determining responsibility for these costs or fines. These are potentially very serious problems and the Commission should take extra precaution to protect against unwarranted and/or excessive costs associated with enforcement or reporting and also against the possibility of passing regulations that cause current existing service contracts to become inequitable.

14.2 FCC: Does the captioning pool consist of an adequate number of competent captioners to meet a non-technical quality standard mandate?

The answer to this question with respect to realtime captioners, of course, depends on what the non-technical quality standards ultimately turn out to be!

14.21 Current Quality Levels in Market Place.

There are approximately 400 realtime captioners currently providing 100% of the realtime television captioning in the United States. For better or worse, they are the very best the industry has to offer. Non-technical quality standards for realtime captioning, therefore, should not be set at or above the ability levels of those captioners as a group and should reflect and allow for the range of quality that currently exists in the market place today.

See example in paragraph 13.41 above. Standards higher than currently exist in the industry, or that are less flexible than would allow for the current range of quality that exists within the industry

to continue to exist, could result in an extreme shortage of any type of captioner, much less competent captioners.

14.22 Recent Loss of Realtime Captioners.

Due to the drastic reductions over the past few years of the rates paid by the realtime television industry for realtime captioning services (25% or more), caption companies have been forced to reduce costs and pay rates to their realtime captioners. As a result of these historical pay cuts, the industry lost a number of experienced captioners who were able to find higher paying jobs in other industries. Over time, the captioning industry has had to find, hire and train new less experienced captioners to replace these more experienced captioners to meet the increased demand associated with the January 1, 2006 FCC phase-in date.

Paragraph No. 15 Pre-produced Programs

15.1 FCC: We also seek comment on whether any non-technical quality standards should be different for pre-produced programs versus live programming. For example, when this issue was raised in 1997, one commenter proposed that the Commission set a maximum error rate of no more than two tenths of a percent (0.2%) of the words in a prerecorded show, and require that no more than 3% of the words in a live show may be wrong, misspelled, or absent.¹ We seek comment on whether these error rates are appropriate and, if not, what error rates would be appropriate.

15.1.1 Offline Captioning Standards.

In paragraph 13.31 above, we offer a specific set of criteria to be considered in measuring the quality of offline captioning, together with a formula for measuring the criteria and also an applicable

quality standard for satisfactory quality. We recommend an overall Total Quality Rating Standard for Offline Captioning (as determined in accordance with our formula above) of 99.5%.

15.1.2 Realtime Captioning Standards.

15.1.2.1 Due to significant differences in the processes used in offline captioning and realtime captioning, the quality standards for realtime closed captioning will necessarily be different from offline standards in both the percentage of acceptable errors and in determining what should or should not constitute an error.

15.1.2.2 Readability Errors verses Completeness Errors

15.1.2.2.1 Readability Errors (see Types of Errors in paragraph 13.32 above) such as misspelled words, wrong words, important punctuation and speaker identification symbols are relatively easy to determine and count, always constitute errors in realtime captioning and may be consistently and objectively measured.

15.1.2.2.2 Completeness errors (i.e. missing words and added words) on the other hand, are much different. They are important, of course, in measuring the quality of captioning but due to several important accepted practices within the realtime closed captioning industry that allow captioners to leave words out or to add words under certain circumstances, all

“missing words” or “added words” do not constitute errors.

Under current industry quality standards, missing or added words are not counted as errors when they are the direct result of;

1. broadcasters speaking at a pace faster than 180 words per minute (i.e. the speed at which captioners are tested in order to become certified by the National Court Reporters Association as a Certified Broadcaster Captioner);
2. captioner paraphrasing of the actual words when the paraphrasing accurately conveys the intended message;
3. captioner intentionally dropping non-essential words or names in favor of clarity and/or in lieu of other worse consequences to the quality of the captioning that would have resulted due to existing challenging circumstances;
4. a captioner dropping words immediately prior to a commercial in order to clear the *encoder in time for the commercial* captioning;
5. the audio source being unclear; or
6. poor enunciation, unclear speech, poor grammar, sentence structure, diction, etc.

15.1.2.3 Response to FCC Suggested Standard for Realtime Captioning Quality.

The quality standard for realtime television captioning suggested by the 1997 commenter referred to above (i.e. “no more than 3% of the words in a live show may be wrong, misspelled, or absent”) is obviously not a viable option because it does not allow for the foregoing exceptions for absent (missing) words. The 3% permissible error rate would also be absurdly low if the foregoing exceptions were not honored.

15.1.2.4 Recommend 3 Different Quality Standards for Realtime Television Captioning

15.1.2.4.1 Readability Rating

1. Measures Quality of the Written Captioning Text

Readability Rating simply measures the quality of the captioning text itself, without regard to what was actually said on the television program.

2. Formula for Calculating Readability Rating.

To determine a “Readability Rating” for a particular realtime captioning file, an evaluator would calculate the number of Readability Errors appearing in the captioning text file (i.e. wrong words, misspellings and important mistakes in punctuation and speaker identifications) in the manner specified in paragraph 13.32 above, subtract the number of Readability

Errors from the total number of words appearing in the captioning text and divide that difference by the number of words appearing in the captioning text. The result, expressed as a percentage, would be the Readability Rating.

3. *Enjoyment.* This measurement reflects to a large degree the level of enjoyment a deaf viewer will experience in using captioning. If captioning has good word choices, proper spelling and good sentence structure, it will be easy and enjoyable to read.
4. *Objective Standard.* Due to the nature of readability errors and the ease with which they can be accurately and consistently identified, the Readability Rating provides a standard that can be fairly and accurately used to evaluate and compare captioning quality from one program to another or one captioner to another, etc.
5. We would recommend a Minimum Readability Rating for a specific television program of 94%, and a Minimum Average Readability Rating of 97% over an acceptable period of time or opportunities, all under ideal captioning conditions with no challenging conditions or mitigating circumstances.

15.1.2.4.2 Completeness Rating

1. Measures Completeness of the transcription of the Spoken Words ... how close a captioner came to a verbatim transcription of the spoken words.

2. Formula for Calculating Completeness Rating.

To determine a "Completeness Rating" for a particular realtime captioning file, an evaluator would calculate the number of Completeness Errors in the manner specified in paragraph 13.32.2 above, that appear in the file, subtract the number of Completeness Errors from the total number of words spoken and divide that difference by the number of words spoken. The result, expressed as a percentage, would be the Completeness Rating.

3. We would recommend a Minimum Completeness Rating for any specific realtime captioning file of 90%, and a Minimum Average Completeness Rating of 93% over an acceptable period of time or opportunities, all under ideal captioning conditions with no challenging conditions or mitigating circumstances.

15.1.2.4.3 Total Quality Rating

1. Total Quality Rating combines the features of both the Readability Rating and the Completeness Rating to provide a rating intended to measure all aspects of realtime captioning.
2. To determine the "Total Quality Rating" for a specific realtime captioning file, an evaluator would add the number of Readability Errors to the number of Completeness Errors, subtract that total from the total words spoken in the program and divide that difference by the total words spoken in the program. The result, expressed as a percentage, would be the Total Quality Rating.
3. We would recommend a Minimum Total Quality Rating for a specific realtime captioning file of 86%, and a Minimum Average Completeness Rating of 90% over an acceptable period of time or opportunities, all under ideal captioning conditions with no challenging or mitigating circumstances.

15.1.2.4.4 Proposed Quality Standards Will Allow

Retention of All Current Captioners in Market

We feel that the foregoing quality standards will result in the highest realtime television quality

standards possible, while retaining all of the captioners currently captioning in the United States and also adding to that base a significant number of new captioners still needed to meet the current demand level resulting from the FCC mandatory captioning regulations. If the FCC were to extend the availability of realtime captioning to markets above 25, as proposed, I believe these quality standards could still be maintained if the new markets were phased in over a reasonable period of time.

Paragraph No. 16 Acceptance of Distributors of Responsibility for Captioning Quality

16.1 FCC: The TDI Petition notes that many distributors disclaim responsibility for the quality of captioning: "Even more disturbing is a recent trend among providers to include a disclaimer in its broadcast stating that the provider is not responsible for the correctness of captions."² Additionally, TDI asserts that the programming distributors should be held ultimately responsible for monitoring captioning.³ TDI argues that if the text is full of errors, it should not be counted as captioned for purposes of meeting the captioning requirements.⁴ We seek comment on these assertions.

16.1.1 Legal Responsibility for Quality

Compliance with all aspects of the closed captioning regulations of the Commission must be measured at the point in the distribution chain when it leaves the facilities of the Distributor (i.e. local television station, cable network or national broadcast facility). The Commission's regulations clearly provide for the Distributor to be responsible for compliance with the closed captioning regulations and that is the last point in which the Distributor has control.

16.1.2 Responsibility for Monitoring Captioning

Our company provides realtime closed captioning services for most of the large television station ownership groups in America and for approximately 100 local television stations and cable networks across the country. We have also been in business for approximately 15 years having had the opportunity of observing the attitude of the television industry towards both technical and non-technical quality of their closed captioning.

There was a great deal of ignorance within the television industry about closed captioning when the Commission's mandatory captioning regulations ("the Act") were initially passed. The operating staffs and technical crews were not well trained and the station's technical setups were less than perfect in many cases. In addition, until approximately January 1, 2004, there was enough closed captioning on local television stations being passed through from national network programming and from offline captioning of pre-recorded programming for most local stations to meet the minimum captioning requirements. Until that time, a little less than 2 years ago, local stations had little need to know much about closed captioning or to worry about quality and reliability of service.

Over the last 2 years we have observed a steady increase in the level of monitoring and quality control being demonstrated by our customers and since January 1, 2004, things have changed significantly. I would guess that many of the complaints of the TDI Group with respect to a lackluster effort on behalf of the television industry in monitoring and quickly responding to on-air captioning emergencies, etc., may have evolved from early periods and may not reflect the current status of the industry. Our company actually logs the amount of downtime it experiences on each of its station or network customers and the percentage of minutes of missed captioning is negligible.

We have also been working closely with many of our customers to develop a combination of technical capability and integrated management policies and procedures to effectively monitor captioning, to assure non-technical quality and to minimize downtime from technical failures and other types of on-air emergencies. I do not think any action is needed by the Commission to assure that these things happen in the future.

16.1.3 Response to Captioning Being "Full of Errors"

Again our company has approximately 15 years of experience in realtime captioning and over that period of time we have had the opportunity to respond to a number of complaints from deaf viewers, and even our own customers, about the quality of captioning on a program.

In considering the need for non-technical quality standards, and/or the necessity of using fines for enforcement of those quality standards, it is extremely important for the Commission to consider the percentage of times in our company's experience that the deaf

viewers and even our own customers have misjudged the quality of the captioning. In nearly every incident of complaints in the last 7 years in our company, we reviewed the original realtime captioning file in detail, prepared a report highlighting all the errors and found the number of errors to be well within industry quality standards.

There is a common misconception in the public and in the deaf community that the quality of realtime captioning is poor ... in fact "full of errors." This perception comes from the fact that realtime closed captioning is not perfect and viewers naturally notice and focus on errors that appear in the closed captioning. It is relatively easy for a viewer to see the errors and observe that there are many of them but few viewers ever notice or attempt to count the number of correct words in the captioning.

Viewers often observe as many as 40 to 80 errors in the captioning of a 30-minute local news program, for example, and conclude that the captioning was atrocious. What they do not know is that there were 3,500 to 5,000 words in the transcript for that program and that the captioner correctly transcribed 98 or 99 out of every 100 words in the captioning. I can also attest to the fact that once we provided this information to the deaf or other complainant, he or she was appreciative of the information and much more understanding about what to expect in the quality of realtime closed captioning.

Paragraph No. 20 Technical Quality Standards

20.1 FCC: The Commission seeks comment on the need for additional mechanisms and procedures in addition to the "*pass through rule*" to prevent technical problems from occurring and to expeditiously remedy any technical problems that do arise. Are such mechanisms and procedures

warranted? If so, what form should they take? We seek comment on the kinds of technical problems experienced by consumers as well as distributors.

20.2 General Comment

We recognize some, but not all, of the symptoms and problems listed in paragraphs 17, 18 and 19 of the Notice discussing the "Pass Through" rule. The potential causes and solutions to those we recognize might involve equipment limitations and associated replacement, captioning policies and procedures and changes to same, careless operations or poorly designed operating policies and procedures within the stations or simply the practical reality that realtime captioning lags behind the audio a few seconds which cannot be fixed.

These issues do not appear to us to be of a nature that a legislative process could address.

Paragraph No. 26 Monitoring and Equipment Maintenance

26.1 FCC: The Commission seeks comment on video programming distributors' responsibility to monitor and maintain their equipment and signal transmissions. Should distributors have specific mechanisms in place for monitoring and maintenance? If so, what should these mechanisms consist of? What impact would such mechanisms have on distributors? We also seek comment on alternate ways to ensure that captioning is delivered intact to consumers. Lastly, we seek comment on whether distributors are monitoring their programming and advertising materials to ensure that a program advertised to be closed captioned is indeed closed captioned.

26.2 We offer no comments on this section.

Paragraph No. 31 Shorter Complaint and Response Times

- 31.1 FCC: As such, we seek comment on whether the Commission should revise the current rule to allow for shorter complaint and response times. We seek comment on what those time frames should be. We also seek comment on whether complainants should be permitted to complain directly to the Commission without complaining to the video programming distributor first. If we decide to retain the current complaint process, should the filing and response deadlines be revised, and if so, how?
- 31.2 Comment. We are of the opinion that the Commission should not shorten the complaint and response times under the current rules. The current procedures provide adequate means for deaf and hard of hearing users of captioning to pursue complaints while at the same time provide important protection for the television and captioning industries against undue burdensome reporting and response obligations with respect to complaints.

Paragraph No. 39 Fines for Non-compliance with Captioning Rules

- 39.1 FCC: We seek comment on whether the Commission should establish specific per violation forfeiture amounts for non-compliance with the captioning rules, and if so, what those amounts should be. We direct commenters to Section 1.80(b) of the Commission's rules for guidance on existing forfeitures for violations of other Commission rules.
- 39.2 Generally the use of fines to encourage compliance with the FCC Captioning Regulations is not necessary and would likely even be counter-productive to the objectives of the FCC's Captioning Regulations in several respects.
- 39.2.1 The production and delivery of realtime captioning, for instance, requires captioners with extremely high captioning and technical skills and knowledge and involves highly technical equipment and processes from the captioner to the television station or network all

the way to the viewer, with many points of failure and opportunity for human error. Breakdowns for one reason or another are going to occur even with the best captioners, best engineers and best technical equipment and software in the world. It would be extremely difficult to determine the cause and source of responsibility of a problem causing non-compliance and to fairly administer fines for non-compliance in a complicated and challenging environment like that.

39.2.2 Errors in realtime captioning are expected and accepted.

Conditions under which realtime television captioning is produced vary significantly from one program to another, from one station to another and from one broadcaster or speaker to another. Realtime captioners also have good and bad days for many different reasons. Again, it would be extremely difficult to determine the cause and source of responsibility of an error appearing in realtime captioning and to fairly administer fines for non-compliance resulting from those errors in a complicated and challenging environment like that.

39.2.3 The use of fines for non-compliance with non-technical quality standards for realtime captioning would result in television stations and networks attempting to pass liability for those fines on to their caption company vendors through their service contracts. That would create a costly and time consuming adversarial relationship between the television stations and networks and their vendors placing their attention on finding fault, etc. rather than teaming up and helping one another to provide high quality captioning and service.

The realtime captioning process involves a highly coordinated effort of the scheduling departments, engineering departments and operating staffs of both the television station or network and the

caption company. It is a dynamic daily relationship that assures that all programming gets scheduled and captioned (whether regular recurring or last minute add-ons or changes, etc.), that captioners can be located and assigned on instant notice for FCC Emergency Captioning, that on-air emergencies are diagnosed and resolved quickly to minimize lost captioning and that the quality of the captioning is good. It is extremely important for caption companies to have an outstanding relationship with their customers and the tension that fines would create would severely restrict the ability of that relationship to exist.

39.2.4 If television stations and networks did attempt to pass responsibility for fines associated with non-compliance with non-technical quality standards for realtime captioning on to their vendors, either the cost of realtime captioning would skyrocket or , due to the poor financial conditions existing in the captioning industry today, captioning service providers would have to exit the industry.

39.3 As indicated throughout all of our Comments, we do not feel the use of fines for enforcement of any of the Commissions captioning rules is appropriate or necessary. We feel that is especially true with respect to enforcement of non-technical quality standards for realtime captioning. However, if the commission were to use fines for that purpose, it should definitely not do so with respect to the occasional violation or minor infractions, and should limit the use of fines to situations involving patterns of continued or repeated offenses over an extended period of time, or grossly negligent or willful violations.

4. Conclusion

Although Caption Colorado is in favor of establishing non-technical quality standards for both offline and realtime captioning, we also believe that the concerns of the deaf and hard of hearing viewers about the non-technical quality and technical quality of realtime captioning may be poorly-based, or at least pre-

mature at this point in time. The vast majority of local television stations will only be earnestly addressing the delivery and quality of realtime captioning of their local live programs as of January 1, 2006, because they have been able to maintain compliance with the FCC Regulations by virtue of the large amount of pass-through captioning associated with network programming and other pre-captioned pre-recorded programming.

We sincerely believe that high quality caption companies and local television stations, working effectively together after January 1, 2006, will produce a consistent high quality product well within acceptable technical and non-technical error rates. We also believe that improper quality standards, complaint procedures or improper use of fines, could easily result in a significant reduction of captioning capacity within the industry and the exit from the industry of the many important players who are necessary to meeting the regulatory objectives of the Commission.

We would, therefore, encourage the Commission to move slowly and carefully when considering the adoption of appropriate technical and non-technical quality standards for realtime television captioning and, especially in the area of reporting, complaint and response rules and the use of fines or other penalties in the enforcement of the standards.